HP StorageWorks Continuous Access EVA 2.1 release notes

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Release notes contents

This document contains information about the 2.1 release of HP StorageWorks Continuous Access EVA. Topics include:

- New features
- Known issues and resolutions
- Product documentation

Much of the information included here is not documented elsewhere, so HP recommends that you read this information thoroughly before using HP StorageWorks Continuous Access EVA.

For supported storage arrays, management server hardware and software, and replication software environments, including restrictions, see the *HP StorageWorks EVA software compatibility reference* on the HP StorageWorks Continuous Access EVA web site: http://h18006.www1.hp.com/products/storage/software/conaccesseva/index.html.

Intended audience

This document is intended for customers and HP-authorized service providers who plan to license and use HP StorageWorks Continuous Access EVA 2.1.

New features

The following features are new with HP StorageWorks Continuous Access EVA 2.1, though not all are fully supported at this time:

- Replication between EVA4000/6000/8000 and EVA3000/5000 arrays.

  - 128 single-member DR Groups on EVA3000/5000, 256 single-member DR Groups on EVA4000/6000/8000.

  - Maximum of 8 members per EVA3000/5000 DR Group, maximum of 32 members per EVA4000/6000/8000 DR group.

  - If replicating between families, then the lesser of the two applies. For example, if replicating between an EVA3000 and EVA4000, the DR group can contain only up to 8 members.

- Improved DR Group Write History Log support, EVA4000/6000/8000 only.

  - You can now choose the disk group to contain the log. The default disk group is the same as for the EVA3000/5000.

  - You can specify a maximum size for the log, with a new default of the total capacity of the DR group's members. On EVA3000/5000 the maximum capacity is twice the total capacity of the DR Group members.

  - You can manually start a full copy of the DR log contents to the DR Group members at any time. Rules for automatic full copy still apply:

    - No free space remains in the assigned disk group.

    - The log has reached the maximum size of 2 TB.

- Increased access to DR Group members. Previously the restriction was a single HBA pair per DR Group, with only one active at a time. With this release HP Continuous Access EVA supports a single SCSI initiator per DR Group member instead of per DR Group. On the EVA 4000/6000/8000 access can be through any host on either the owning controller or alternate controller. Because the EVA3000/5000 does not support the active-active host port failover, the increased access applies only to the two ports on the controller owning the DR group.

- Common cable scheme for HP Continuous Access and non-Continuous Access environments on EVA4000/6000/8000.

  - In the dual fabric this means the odd-numbered ports are cabled to one fabric and the even-numbered ports cabled to the other fabric. All ports sharing a fabric must be in the same intersite zone and/or virtual fabric.

  - If replicating to an EVA3000/5000, the EVA3000/5000 is cross-cabled as shown in the *HP StorageWorks Continuous Access EVA planning guide*.

- Improved management of the intersite link.

  - Auto-suspend the connection on failover.

  - Auto-suspend the connection on link failure and the start of logging.

Current support limits on EVA4000/6000/8000

At this time HP Continuous Access EVA supports only the following on EVA4000, EVA6000, and EV8000 arrays:

- Up to 32 copy sets.

- Up to 32 single-member DR Groups.

- Only HP-UX and Windows (see the *HP StorageWorks EVA software compatibility reference* for details).

- Synchronous replication only.

- Two arrays per virtual SAN in a single relationship (no fan-out, fan-in, or cascaded relationships)

- EVA8000 is limited to a maximum of 3 host ports on any 8 or 16-port B-series switch (limit does not exist on C-series or M-series switches).

- No dynamic load balancing (manual load balancing only).

- Only two switches per fabric and only dual fabrics with at least two HBAs on each server.

- Direct Fibre Channel, maximum of 200 km over WDM. No FCIP or FC-SONET.

- Maximum of 15 HBA pairs (server equivalents).

- Manual or scripted failover (using SSSU or HP Replication Solutions Manager) failover only. Not supported on Cluster Extensions EVA and MetroCluster EVA.

Known issues and resolutions

This section describes known issues and workarounds for this release. For remote replication issues that are specific to HP StorageWorks Replication Solutions Manager, see the release notes for the replication manager (included with this release).

Direct-connect not supported

HP StorageWorks Continuous Access EVA does not support direct-connect configurations.

Deleting DR Groups when destination is unavailable

If you want to delete a DR Group while the destination is unavailable, the only valid option is to detach the remote copies. You cannot delete the remote copies using the delete command, since the remote copies are unavailable.

The HP Replication Solutions Manager GUI gives you a selection of destination virtual disks to discard. Leave these unchecked. To delete the DR Group through the HP Replication Solutions Manager CLUI, do not use the `del[ete] dr[_group]|drg <dr_group name> delete` command. In the job editor, do not use the `DeleteDrGroup (%drgroup_unc_name%,DELETE)` command.

Recovering from a disk group hardware failure

While performing the recovery procedure "Recovering from a disk group hard failure" in *HP StorageWorks Continuous Access EVA administrator guide*, step 12 may fail. In step 12 you recreate the missing DR Groups. Creating a DR group from both the Virtual Disk folder and Date Replication folder will not show the virtual disks needed for the DR Group creation.

You must refresh the array using HP Command View EVA. When complete, the needed virtual disks with the correct properties will show as available for DR Group creation.

Once the correct virtual disks are available, return to step 12 of the recovery procedure and continue to the end of the procedure.

Source-source DR Groups

Certain conditions result in a DR Group being a source on both sites. If a DR Group is suspended while the intersite links are down, then once the intersite links are available again the DR Group will be a source on both sites until the suspended DR Group is resumed. This can happen during any of these events:

1. User issued a failover with the suspend option during an unplanned failover.

2. User set DR Group to autosuspend enabled before or after the unplanned failover, but before the intersite links were available.

3. User set DR Group to suspend before or after the unplanned failover, but before the intersite links were available.

To resolve the source-source condition, use HP Command View EVA or the Storage System Scripting Utility to resume the DR Group.

Suspend after failover not valid for DR Groups with failsafe enabled

If you perform a planned failover where both the source and destination are available, the failover with the suspend option selected is not valid on a DR Group with failsafe enabled. Any DR Groups with failsafe enabled will not failover. If any DR Groups are set to failsafe enabled and selected for failover, in the HP Replication Solutions Manager GUI, do not check the box for Suspend after failover, if available. In the CLUI, do not use the `set dr[_group]|drg <dr_group name> [suspend_and_failover|saf]` command. In the job editor, do not use the `FailoverDrGroups (%drgroups%, TRUE)` command.

Product documentation

Table 1 lists the current versions of product documentation.

Table 1 Additional documentation

Documentation	Edition	Part Number	Location
HP StorageWorks Continuous Access EVA administrator guide	1st Edition, May 2005	T3687–96019	http://h18006.www1.hp.com/products/storage/software/conaccesseva/index.html, also the product documentation CD.
HP StorageWorks Continuous Access EVA 2.1 overview	1st Edition, May 2005	T3687–96007	Product documentation CD, also printed in the product kit.
HP StorageWorks Continuous Access EVA planning guide	2nd Edition, May 2005	T3687–96018	http://h18006.www1.hp.com/products/storage/software/conaccesseva/index.html, also the product documentation CD.
HP StorageWorks Continuous Access EVA Performance Estimator user guide	2nd Edition, May 2005	T3687–96020	http://h18006.www1.hp.com/products/storage/software/conaccesseva/index.html, also the product documentation CD.
HP StorageWorks Replication Solutions Manager installation and administrator guide	2nd Edition, May 2005	T3687–96008	http://h18006.www1.hp.com/products/storage/software/conaccesseva/index.html , also the product documentation CD.
HP StorageWorks EVA replication license key installation instructions	3rd Edition, April 2005	T3687–96024	Printed in the LTU envelope.
HP StorageWorks Replication Solutions Manager Command Line Interface reference	2nd Edition, May 2005	T3687–96009	http://h18006.www1.hp.com/products/storage/software/conaccesseva/index.html, also the product documentation CD.
HP StorageWorks Replication Solutions Manager 1.1 release notes	1st Edition, May 2005	T3687–96011	http://h18006.www1.hp.com/products/storage/software/conaccesseva/index.html
HP StorageWorks JREserver installation instructions	2nd Edition, December 2004	AA-RVHQB-TE	Product CD
HP StorageWorks EVA software compatibility reference	1st Edition, May 2005	T3724–96004	http://h18006.www1.hp.com/products/storage/software/conaccesseva/index.html

For information about HP StorageWorks Enterprise Virtual Array 3000, see: http://h18006.www1.hp.com/products/storageworks/eva3000/index.html

For information about HP StorageWorks Enterprise Virtual Array 4000, see: http://www.hp.com/go/eva4000

For information about HP StorageWorks Enterprise Virtual Array 5000, see: http://h18006.www1.hp.com/products/storageworks/enterprise/index.html

For information about HP StorageWorks Enterprise Virtual Array 6000, see: http://www.hp.com/go/eva6000

For information about HP StorageWorks Enterprise Virtual Array 8000, see: http://www.hp.com/go/eva8000

For SAN design or SAN extensions, see: http://hp.com/go/sandesignguide

For HP StorageWorks Command View EVA, see http://h18006.www1.hp.com/products/storage/software/cmdvieweva/index.html.